

MATERIAL SAFETY DATA SHEET

SECTION I

MANUFACTURER'S NAME E. I. du Pont de Nemours & Co. (Inc.)		EMERGENCY TELEPHONE NO. (302) 774-7500
ADDRESS (Number, Street, City, State, and ZIP Code) Wilmington, DE 19898		
CHEMICAL NAME AND SYNONYMS Hydrofluoric Acid, Aqueous		TRADE NAME AND SYNONYMS Hydrofluoric Acid 70% Tech.
CHEMICAL FAMILY Inorganic Acid	FORMULA HF Solution, Aqueous	

SECTION II HAZARDOUS INGREDIENTS OF MIXTURES

70% HF in water

SECTION III PHYSICAL DATA

BOILING POINT	66 C	151.9 F	SPECIFIC GRAVITY (H ₂ O=1)	1.258
VAPOR PRESSURE (mm Hg) @ 20 C/ 68 F	124		PERCENT VOLATILE BY VOLUME (%)	100
VAPOR DENSITY (AIR=1)	0.7		EVAPORATION RATE (ether = 1)	less than 1
SOLUBILITY IN WATER	complete			
APPEARANCE AND ODOR	Clear, colorless to slightly tinted fuming liquid; pungent odor			

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used) Non-flammable	FLAMMABLE LIMITS	LEL	UEL
EXTINGUISHING MEDIA Water		AUTO IGNIT. TEMP.	
SPECIAL FIRE FIGHTING PROCEDURES Cool tank with water if exposed to fire. Wear self-contained breathing apparatus & full protective clothing including boots.			
UNUSUAL FIRE AND EXPLOSION HAZARDS Hydrofluoric Acid corrodes most metals releasing flammable & explosive concentrations of hydrogen (particularly when diluted).			

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE (ACGIH) 3 ppm (hydrogen fluoride)	TIME WEIGHTED AVERAGE (OSHA) Not established
EFFECTS OF OVEREXPOSURE Extremely hazardous liquid and vapor. Severe inhalation, skin and eye hazard. Causes severe burns which may not be immediately painful or visible.	

EMERGENCY AND FIRST AID PROCEDURES If contact is even suspected, first aid treatment should be started immediately. Call physician immediately. Immediately flush with large quantities of cool water for at least 15 minutes while removing contaminated clothing & shoes; pay particular attention to skin under nails. Then apply iced alcoholic or aqueous benzalkonium chloride solution, iced 70% ethyl alcohol, or iced saturated solution of Epsom Salts (magnesium sulfate). If these solutions are not available, continue washing in cool water until medical help is obtained. (See Attached

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